

WHAT IS CLAIMED IS:

1. A method for reforming mechanical characteristics of an Al alloy casting by subjecting the Al alloy casting to the action of temperature and pressure, said method comprising subjecting said Al alloy casting to a high temperature/high pressure treatment, reducing the pressure while maintaining the temperature of the thus-treated Al alloy casting at about the same temperature as the temperature of the high temperature/high pressure treatment, and subsequently carrying out solution treatment, quenching, and aging in this order.
2. The method of claim 1, wherein, prior to said high temperature/high pressure treatment, the Al alloy casting is preheated to a temperature near said high temperature and then said high temperature/high pressure treatment is performed under the application of pressure.
3. The method of claim 1, wherein a heat insulating structure is provided, said Al alloy casting is accommodated in the interior of said heat insulating structure and is then subjected in this state to said high temperature/high pressure treatment and said solution treatment.
4. The method of claim 1, wherein said Al alloy casting is covered with a heat-resistant porous heat insulator and is then subjected in this state to said high temperature/high pressure treatment and said solution treatment.